

Date: Thursday, 5/4/2006 11:19:45 AM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : BLOWER INLET ADAPTER
Job Number : 26990	
Estimate Number : 12318	
P.O. Number : N/A	Part Number : D3473043
This Issue : 5/4/2006 S.O. No. : N/A	Drawing Number : D3473 REV.A
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : SMALL / MED FAB	Drawing Revision : A
Previous Run : 26614	Material : N/A
Written By : <u>SEE COMMENT BELOW</u>	Due Date : 5/28/2006
Checked & Approved By : <u>06.05.05</u>	Qty: <u>2/4</u> Um: Each
Comment : est rev. A 06.03.02 new issue EC	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	D34735	VERTICAL TUBE
-----	--------	---------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty	Part number	Description	Batch
1	D3473-5	tube	B26119

2.0	D34733	COVER
-----	--------	-------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty	Part number	Description	Batch
1	D3473-3	Cover	B27018

3.0	D34739	FLANGE
-----	--------	--------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty	Part number	Description	Batch
1	D3473-9	Flange	B26121

4.0	D34731	DUCT
-----	--------	------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty	Part number	Description	Batch
1	D3473-1	Duct	B27017

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Date: Thursday, 5/4/2006 11:19:45 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BLOWER INLET ADAPTER

Job Number: 26990

Part Number: D3473043

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

D34737

HORIZONTAL TUBE



Comment: Qty.: 1.0000 Each(s)/Unit Total: 8.0000 Each(s)

Pick:

Qty Part number Description Batch

1 D3473-7 Tube ~~B3473~~ B 27020

6.0

AN960C416L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total: 16.0000 Each(s)

Pick:

Qty Part number Description Batch

2 AN960C416L washer M18822

7.0

NAS1031C3W

Nutplate



Comment: Qty.: 6.0000 Each(s)/Unit Total: 48.0000 Each(s)

Pick:

Qty Part number Description Batch

6 NAS1031C3W Nutplate M100049 See w/o B 26121

8.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Drill hole as per dwg D3473

2-Spot weld as per dwg D3473

SB 06/06/07

9.0

QC5/9

WELD INSPECTION



Comment: WELD INSPECTION

SB 06/06/07

10.0

PACKAGING 1

PACKAGING RESOURCE #1

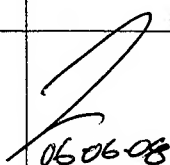


Comment: PACKAGING RESOURCE #1


Identify and Stock

Location: GA

SB 06/06/07

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector	
060609	7	<del>But plates not required. D3473-9 has not plates installed on it's own w/o.</del>						
060609	7	But plates to be installed on the D3473-5 w/o. permanent change.					 060608	

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☐ No ☒ DQA:  Date: 06/06/09

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Date: Thursday, 5/4/2006 11:19:45 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BLOWER INLET ADAPTER

Job Number: 26990

Part Number: D3473043

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

DC

DOCUMENT CONTROL



(2)

Comment: DOCUMENT CONTROL

Inspection Level 21

*Handwritten:* 06/06/09

Job Completion



*Handwritten:* 06-06-08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

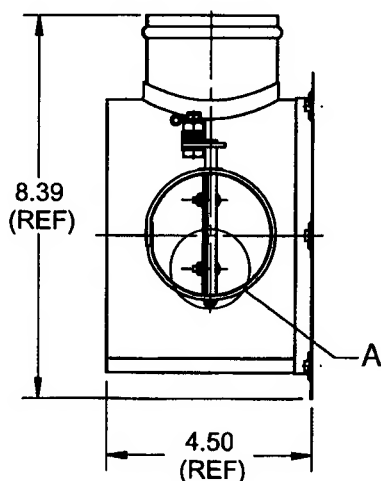
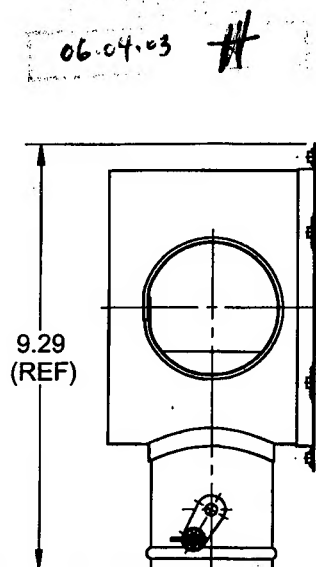
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries

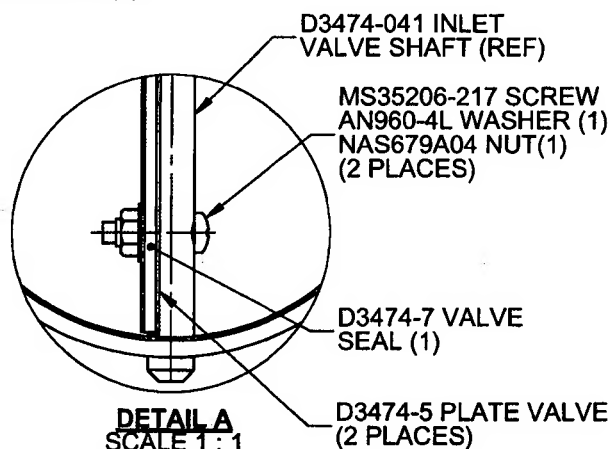
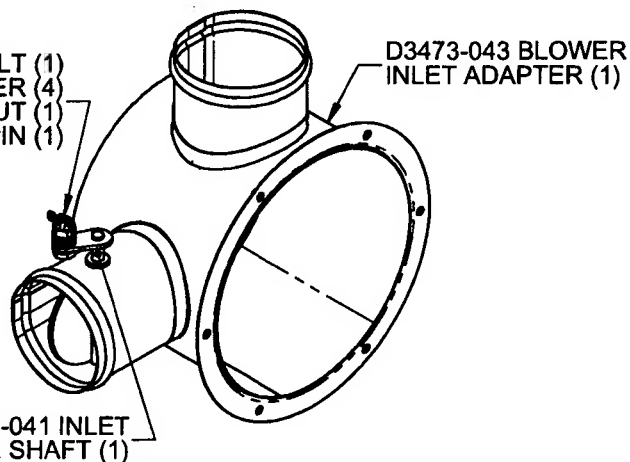
QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_



DESIGN B	DRAWN BY B	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED H	APPROVED H	DRAWING NO. <b>D3473</b>	REV. A SHEET 1 OF 7
DATE <b>06.02.07</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:4
A	06.02.07	NEW ISSUE	



D3470-9 BOLT (1)  
AN960-416 WASHER (4)  
AN310-4 NUT (1)  
MS24665-153 COTTER PIN (1)



### **D3473-041 BLOWER INLET ADAPTER**

#### **NOTES:**

- 1) IDENTIFY WITH DART P/N D3473-041 USING FINE POINT PERMANENT INK MARKER
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3473-041	BLOWER INLET ADAPTER
1	D3470-9	BOLT
1	D3471-043	BLOWER INLET WELDMENT
1	D3474-041	INLET VALVE SHAFT
2	D3474-5	BUTTERFLY VALVE
1	D3474-7	BUTTERFLY VALVE SEAL
1	AN310-4	NUT
2	AN960-4L	WASHER
4	AN960-416	WASHER
1	MS24665-153	COTTER PIN
2	MS35206-217	SCREW
2	NAS679-A04	NUT

UNCONTROLLED COPY

COPYRIGHT © 2006 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

SUBJECT TO AMENDMENT

WITHOUT NOTICE

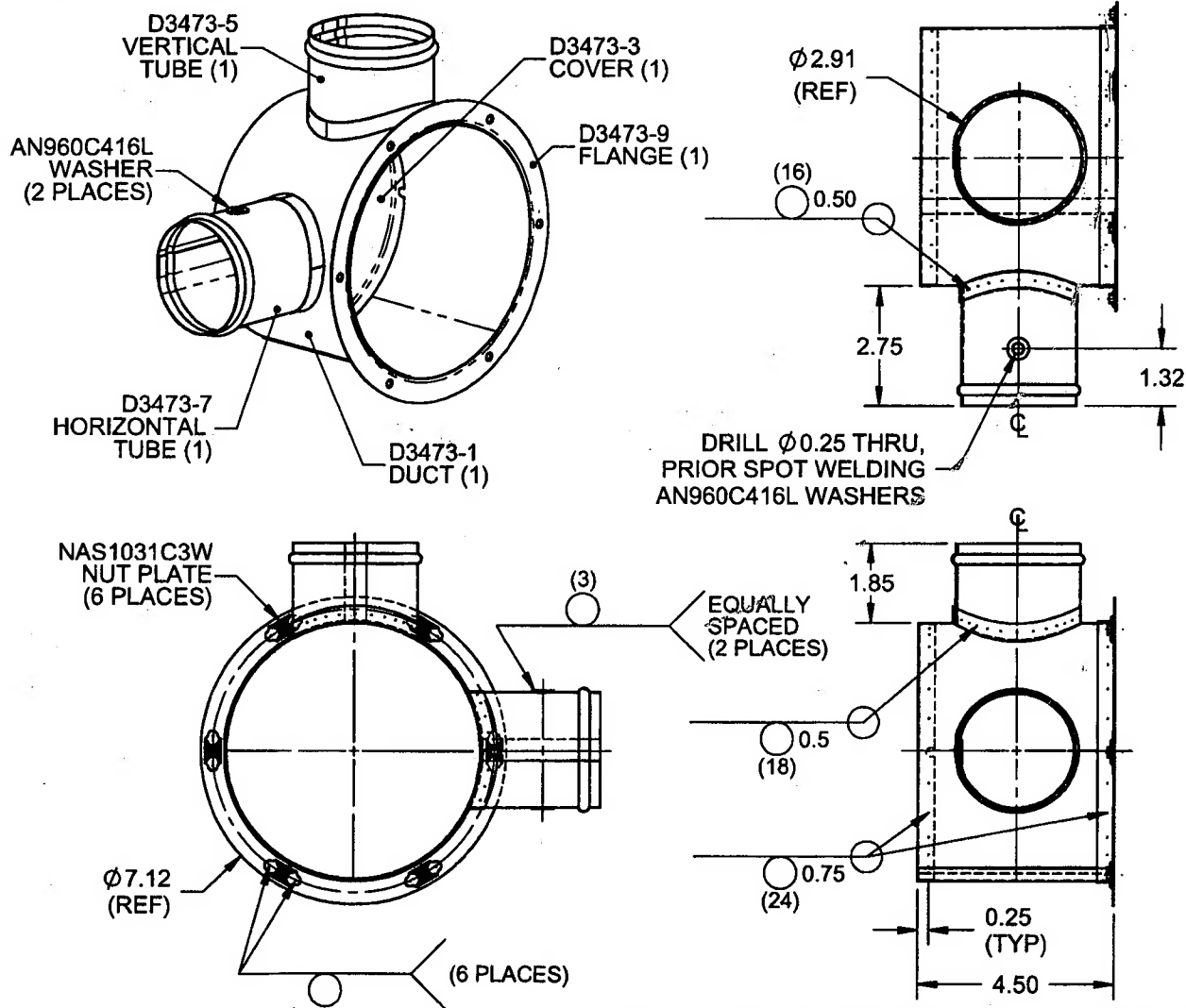
WORK ORDER

NO. 26990



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3473	REV. A SHEET 2 OF 7
DATE 06.02.07		TITLE BLOWER INLET ADAPTER	SCALE 1:4

RELEASED  
06.04.03 *[Signature]*



### D3473-043 BLOWER INLET WELDMENT

#### NOTES:

- 1) SPOT WELD PER DART QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3473-043	BLOWER INLET WELDMENT
1	D3473-1	DUCT
1	D3473-3	COVER
1	D3473-5	VERTICAL TUBE
1	D3473-7	HORIZONTAL TUBE
1	D3473-9	FLANGE
2	AN960C416L	WASHER
6	NAS1031C3W	NUT PLATE

COPYRIGHT © 2006 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

SUBJECT TO AMENDMENT

WITHOUT NOTICE

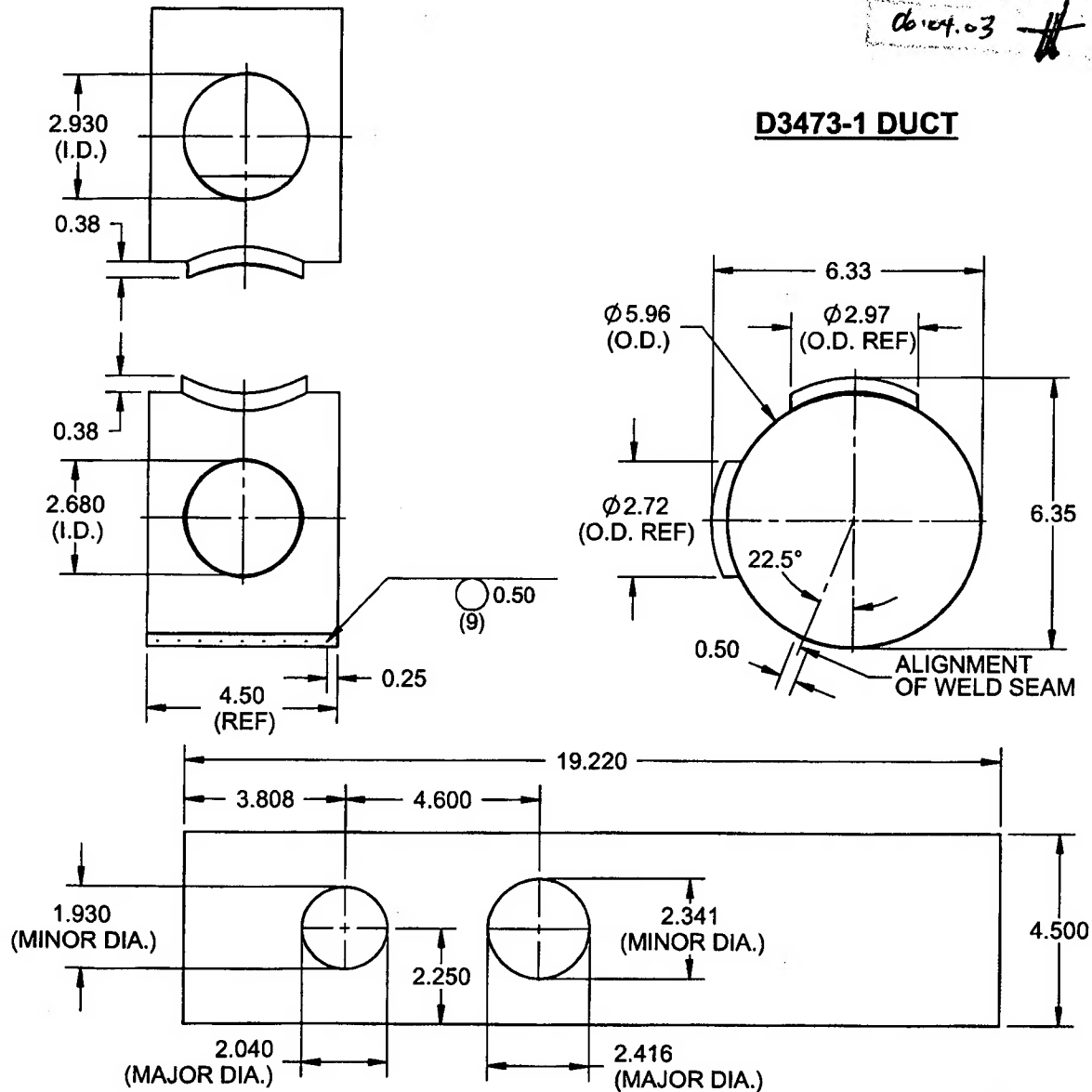
WORK ORDER

NO. 26990

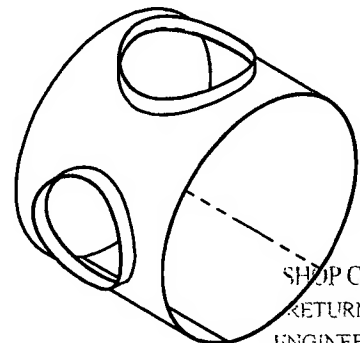


**DART**

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3473</b>	REV. A SHEET 3 OF 7
DATE <b>06.02.07</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:4

**D3473-1F DUCT FLAT PATTERN****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED)  
2B FINISH 26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010



SHOP COPY  
RETURN TO  
ENGINEERING

**COPYRIGHT © 2006 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED, REPRODUCED, OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

WITHOUT NOTICE

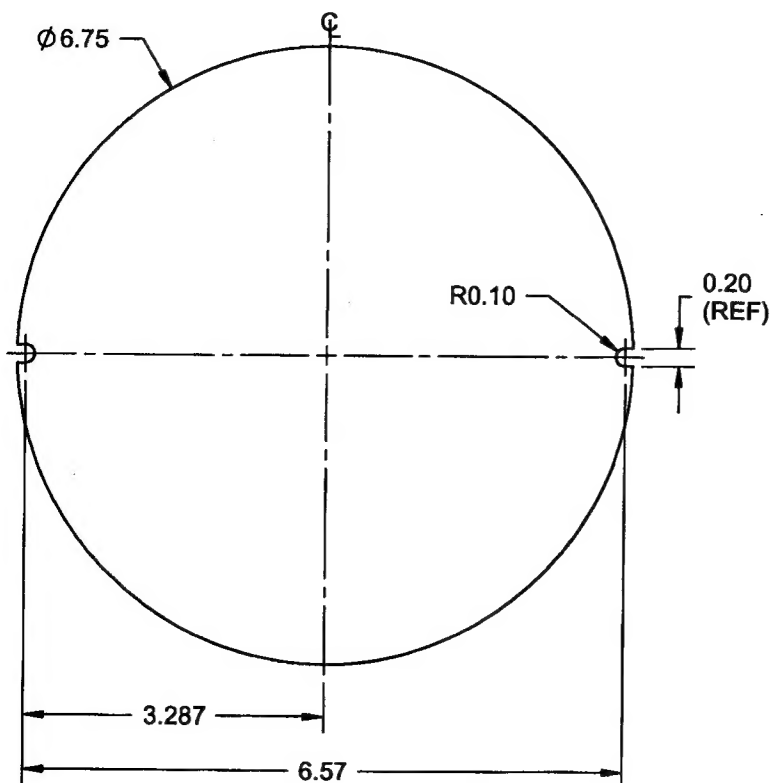
WORK ORDER

NO. **26990**

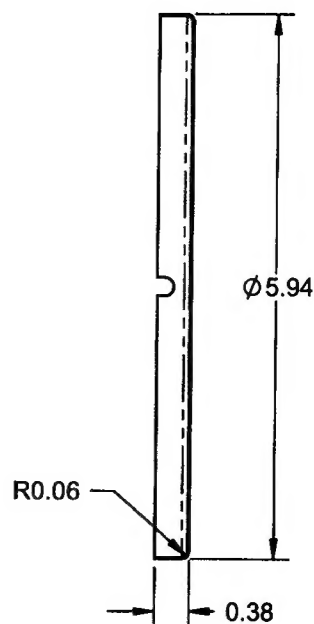


DESIGN #	DRAWN BY #	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3473	REV. A SHEET 4 OF 7
DATE 06.02.07		TITLE BLOWER INLET ADAPTER	SCALE 1:2

# 06.04.03



**D3473-3F COVER FLAT PATTERN**



**D3473-3 COVER**

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) PART IS SYMMETRICAL ABOUT CENTERLINE
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 26990

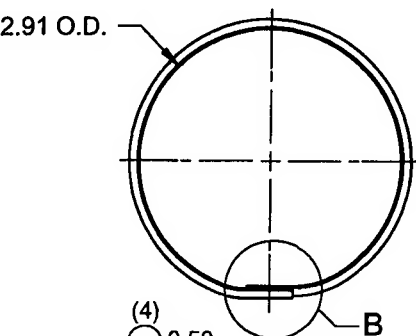
COPYRIGHT © 2006 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

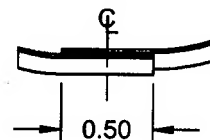
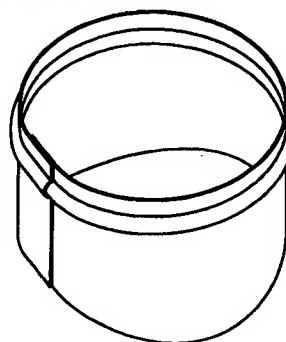
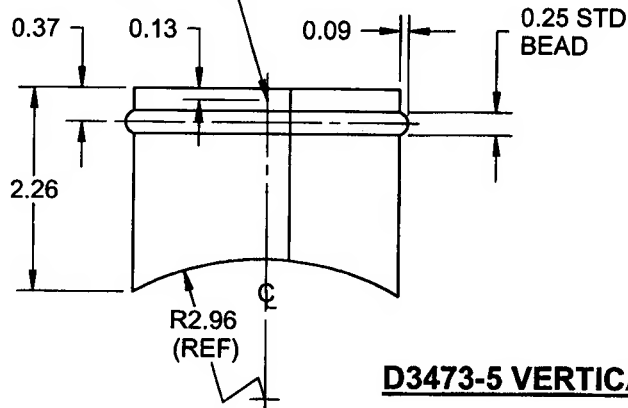


DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3473</b>	REV. A SHEET 5 OF 7
DATE <b>06.02.07</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:2

Ø2.91 O.D.

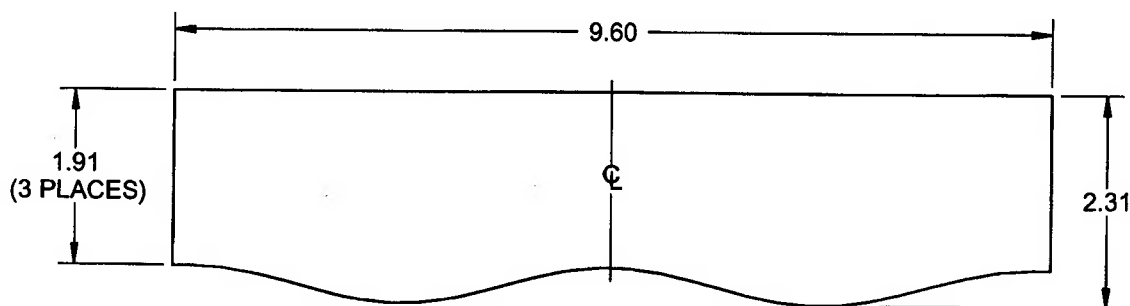


(4) 0.50



**DETAIL B**  
SCALE 1:1

**D3473-5 VERTICAL TUBE**



**D3473-5F VERTICAL TUBE FLAT PATTERN**

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

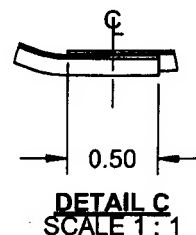
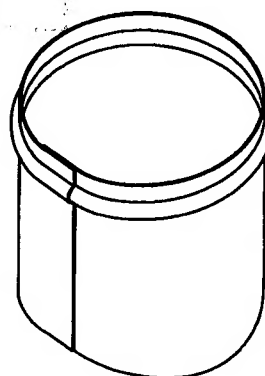
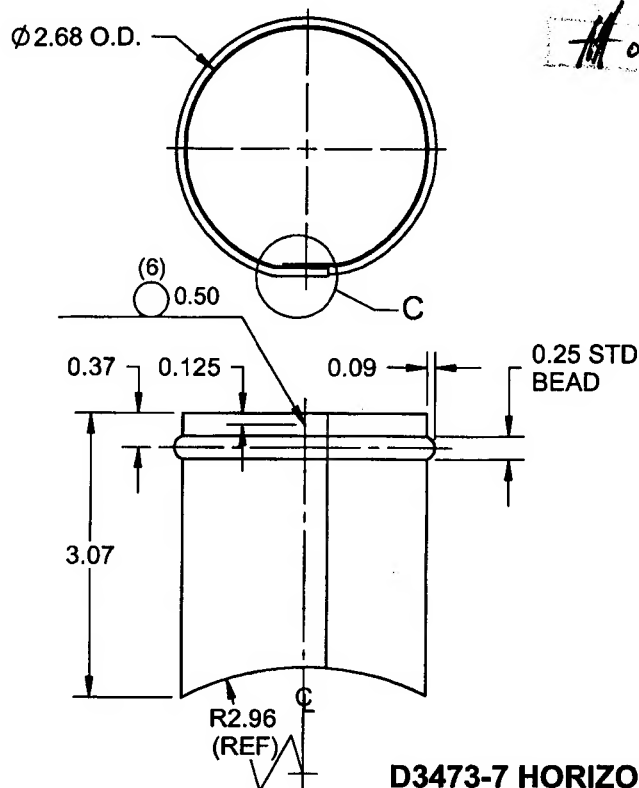
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 26990

**COPYRIGHT © 2006 BY DART AEROSPACE LTD.**

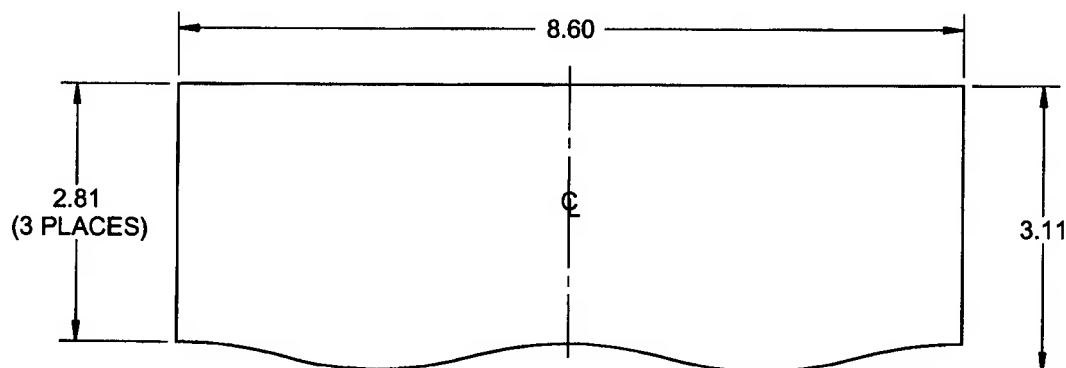
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3473	REV. A SHEET 6 OF 7
DATE 06.02.07		TITLE BLOWER INLET ADAPTER	SCALE 1:2



**D3473-7 HORIZONTAL TUBE**



**D3473-7F HORIZONTAL TUBE FLAT PATTERN**

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

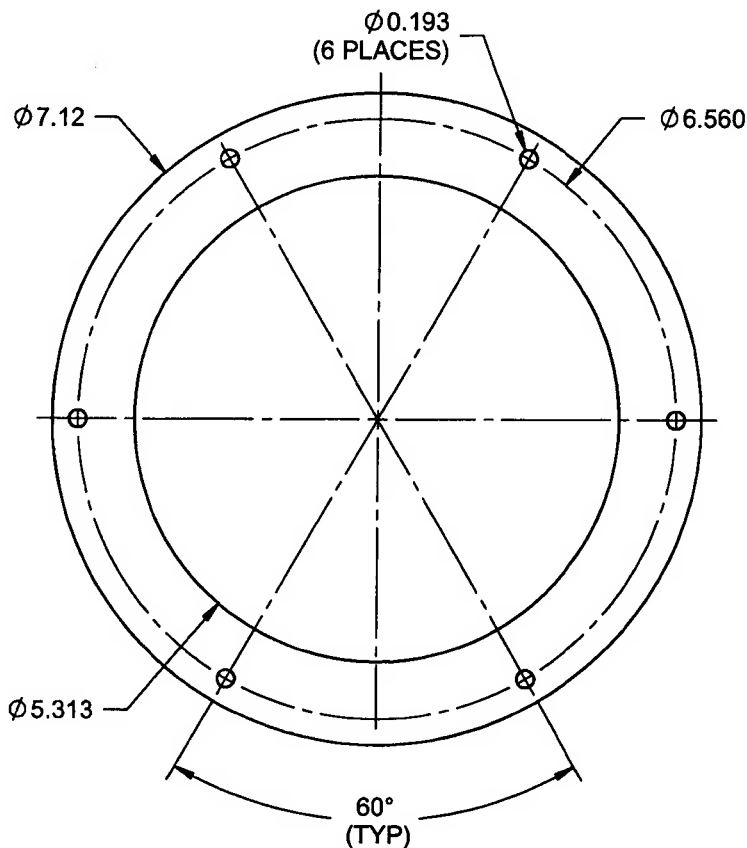
SHOP COPY  
RETURN TO  
ENGINEERING  
CONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 26990

COPYRIGHT © 2006 BY DART AEROSPACE LTD.

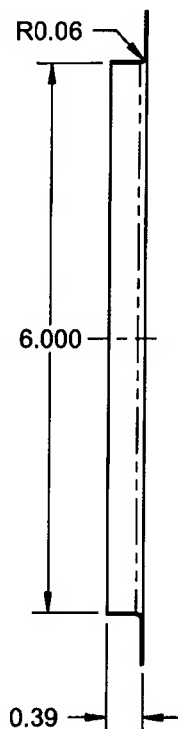
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3473	REV. A SHEET 7 OF 7
DATE 06.02.07		TITLE BLOWER INLET ADAPTER	SCALE 1:2



**D3473-9F FLANGE FLAT PATTERN**



**D3473-9 FLANGE  
BENDING DETAIL**

**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

SHOP COPY

RETURN TO  
ENGINEERING

CONTROLLED COPY  
SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 26990

**COPYRIGHT © 2006 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.